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Declining Diversity and Declining Societies: China, the West, and the Future of the Global Economy

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Declining Diversity and Declining Societies: China, the West, and the Future of the Global Economy

**Erik S. Reinert (Tallinn University of Technology and The Other
Canon Foundation, Norway) & Ting Xu (Queens University, Belfast)**

(eriksreinert@gmail.com, t.xu@qub.ac.uk)

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The Uno Newsletter: Rejuvenating Marxian Economics through Uno Theory

Office: Uno Newsletter, Musashi University, Toyotama Kami 1-26-1 Nerima-ku,
Tokyo 1768534 Japan

Email: contact@unotheory.org

Homepage : <http://www.unotheory.org>

At a crucial point in the history of human life, imperial China decided to scrap the technology of interoceanic shipping and navigation that, if pursued, might well have converted the central historical scheme of European westward expansion to an alternative tale of Oriental eastward exploration in the New World.¹

Stephen Jay Gould (1941-2002), Harvard biologist and historian of science.

Recent scholarship on global history (e.g., Pomeranz 2000; Wong 1997) has criticized the Eurocentric portrait (e.g. Landes 1998) of the long-term backwardness of ‘the East’. Pomeranz argued that Europe only superseded China in development around 1700. Most modern scholarship agrees to this new interpretation, but most scholars think the date was earlier by a hundred years or less than the date suggested by Pomeranz. This paper will not discuss *when* the West superseded China, but rather discuss some of the mechanisms as to *why* this happened, and also why Europe seems to be consciously promoting the same forces which weakened China and started a process of decline some 400 years ago.

In this paper we argue that a key element in China’s relative decline – as compared to the West – during the 16th to 18th century, lies in the elimination of diversity under a consolidated and centralized regime with few ambitions for territorial and colonial expansion. During the same period, or rather starting in the 1400s, Europe – and later the West in general – experienced a virtual explosion of intellectual creativity and development, the indispensable basis of which we argue was a huge diversity of polities, policies, cultures, contexts, and – consequently – also of opinions. In other words, simultaneously with China’s process of de-diversification and falling behind, Europe forged ahead² based on an explosion of increasing diversity. Starting with the Renaissance, Europe became a huge laboratory where a plethora of ideas flourished and – to a larger degree than now – this immense number of ideas were allowed to survive and thrive because of the existence of literally hundreds of small states, each with a different economic and cultural context and a different intellectual agenda.

We would argue that the historical record shows that successful policy making consists not in standardizing policies in all setting – which appears to be the present policy of the European Union – but rather in adapting the successful policies in foreign settings to one’s own context.³ Matching policies to context – e.g. successful industrialization in anti-pope England to the Papal States in Italy – was the name of the successful game. We even argue that the Renaissance – normally perceived as a monotheistic and Catholic affair – contained an important injection of neo-paganism and polytheism, religious diversity, also by one of its key promoters.

Today’s mainstream economics is ill-positioned to handle diversity and its implications.⁴ At its very core, in the economic heritage of Adam Smith and David Ricardo stands a *de facto*

¹ Gould, Stephen Jay, *Full House. The Spread of Excellence from Plato to Darwin*, New York: Harmony Books (Crown Publishers), 1996.

² „Falling behind“ and „forging ahead“ are terms introduced by Stanford economist Moses Abramowitz (1912-2000).

³ See Reinert, Sophus, *Translating Empire: Emulation and the Origins of Political Economy*, Cambridge, MA: Harvard University Press, 2011.

⁴ Reinert, Erik, 'The Terrible Simplifiers: Common Origins of Financial Crises and Persistent Poverty in

negation of diversity which is rarely discussed. Smith and Ricardo's perhaps main theoretical achievement was that they created order by converting the enormous diversity both in production and in trade into one single common denominator: *labour hours*. By doing this they sweepingly did away with diversity. At the very core of modern economics, then, stands an "equality assumption"⁵, i.e. the absence of diversity.

As Joseph Schumpeter argued, economics faces an eternal trade-off between accuracy and irrelevance. Western economics opted for the accurate but fundamentally counterintuitive level of abstraction – the labour-hour based economics where money is absent – founded by Smith and Ricardo. We all understand that labour hours spent doing surgery in a hospital are qualitatively different from the labour hours spent washing the floors of the same hospital, and that a country inhabited by surgeons would have a higher income than one inhabited by cleaning personnel. In terms of Ricardian logic of comparative advantage, the cleaning personnel would specialize in a comparative advantage in being poor.

However, imperial power and David Ricardo's arguments combined to convince the colonies – including China and Japan – that it was in their interest to let England specialize in manufacturing industry. It was only towards the end of the 19th century, after having signed long-term trade treaties with the West, that the reality of the Ricardian logic was discovered in China and Japan. These trade treaties with the West both in Chinese and Japanese tradition are still called *the unfair treaties*.

This contrasts with 19th century US economics and industrial policy, which was based on an understanding of diversity and hierarchies sometimes expressed through a biblical metaphor: the US did not want to be the 'hewers of wood and drawers of water' (Joshua 9: 21), i.e. the performers of menial tasks, in the global economy.⁶ The high level of abstraction in mainstream economics – labour hours – was a prerequisite for making colonialism morally acceptable, i.e. closing the eyes of Westerners and Europeans alike to the fact that your wealth did not depend on what you produced, that free trade was to everyone's benefit.

With modern evolutionary economics (Nelson & Winter 1982) diversity was reintroduced in the profession. So far, unfortunately, this approach has been limited to relatively narrow studies of innovation and studies of innovation systems on the national level⁷. This paper addresses the wider role of diversity *per se*, and although it can not do much more than scratching the proverbial surface, we believe modern economics' failure to incorporate the role of diversity has serious implications. These implications are now becoming visible in a relative decline of the West and the reemergence of China and Asia.

Economic Theory and the New „1848 Movement“, DESA Working Paper No. 88, 2009, in particular pp.2-3.

⁵ Reinert, Erik S. 2007

⁶ For a discussion of diversity and hierarchy, see Reinert, Erik S. 'Emulation vs. Comparative Advantage: Competing Principles in the History of Economic Policy'. In Cimoli, Mario, Giovanni Dosi and Joseph Stiglitz (eds), *Industrial Policy and Development; the Political Economy of Capabilities Accumulation*, Oxford University Press, 2009, pp. 79-106.

⁷ This need for a broader application of evolutionary economic principles, also in development economics, was the logic behind the edited volume by E. Reinert (2004).

We argue that the neglect of diversity for a long time was the basis of standard economic theory, including Ricardian trade theory, and also indirectly of Western hegemony. But in spite of past successes from the application standard economic theory, this theory is now backfiring or boomeranging. The West created a set of economic theories that benefit the world technological leaders, and – as their leadership is now being challenged – should have reverted to a more defensive theory. But the West essentially started to believe in its own propaganda – that comparative advantage and not technological leadership is what counts – and now experiences that its technological leadership is being eroded.⁸

Diversity and the ‘evolutionary discovery process’ have been crucial to Europe’s technological leadership. Eighteenth-century Europe was trying to establish a national ‘best practice’ from a large number of practices in a large number of different states. By contrast, China’s centralization and standardization in the eighteenth century stifled diversity, experiments, creativity and innovation. However, Europe now is losing diversity and becoming ‘standardized’ and ‘homogenized’ in a lot of areas from currency to bank supervision to standardization of shapes of cucumbers to research policy, whereas China is becoming a laboratory for different experiments with local reforms. Europe and China appear to be changing places again, just as they did some time during the 17th century.

Diversity is clearly part of nature’s strategy for the survival of species from natural shocks of all kinds, but diversity as a strategy is also consciously employed in so-called “primitive” societies for the same reason. In the high Andes up to twenty different species of potatoes are often planted in the same field. One species survives frost in the flowering season, another severe drought in the growing season, etc. Among Saami reindeer herders in Northern Fennoscandia the degree of diversity is the most important criterion for the beauty of a herd, and for the same reason. Diversity represents an insurance policy.

This paper examines and compares the trajectories of the rise and fall of diversity in Europe and China and the implications of such a comparison for the future of global economy. Drawing on the discourses of evolutionary economics, the paper re-evaluates the changing nature of the ‘market’ and the institutional and legal frameworks created in order to regulate the market. The paper argues that the ‘market’ is much more than a mechanism setting prices, and that the idea of the ‘market’ should be extended to being an arena where different ideas, in the form of laws, types of government, efficiency of armaments, and economic policies are compared and tested against each other. This is crucial to the promotion of creativity and innovation and the future of global economy.

Evolution and Development as Increasing Diversity.

⁸ See Mathews and Reinert, forthcoming (2013), for a discussion of this as regards energy technology.

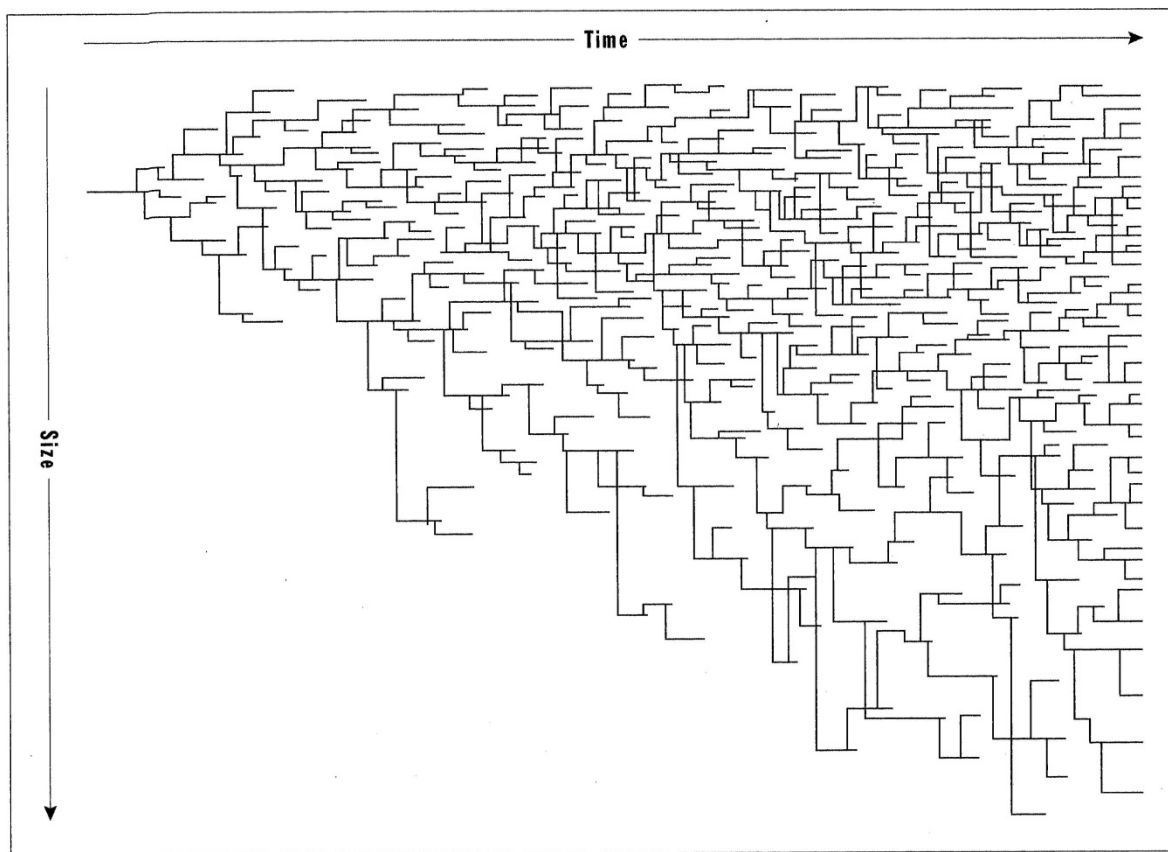


Figure 1: Increasing Diversity over Time.

Source: Gould, Stephen Jay, *Full House. The Spread of Excellence from Plato to Darwin*, p. 165.

The evolution of diversity may be illustrated through Figure 1, where the process of evolution co-exists with an increase of diversity in terms of biological species. The process starts from a common founding member at the left wall of the drawing. The founding members of a species are unspecialized, in the sense that they can tolerate a wide range of climates and habitats. As the evolution evolves randomly, more specialized species appear, some of them very large, those indicated in the right part of the drawing. One example of such a specialized species is a Chinese panda which can only survive on one species of bamboo. With this Gould proposes world history as a “history of expanding variation” (p. 169).

Transferring this picture to economic diversity, each end point represents a technology and / or a product.⁹ End points that do not reach the right-hand side of the drawing are products, or technologies, that no longer exist. Near the left wall life and technologies are necessarily simple. One cannot suggest that a lion sprang out of the primeval soup, bacteria had to come

⁹ This drawing was first used for the purpose of explaining economic diversity in a 1996 paper written in Norwegian.

first. Likewise, you cannot expect the Information Age to precede the Stone Age.¹⁰ Gould discusses the differences between biological and technological evolution, and argues that a main difference obviously is the speed with which technological evolution proceeds.

Let's say that the single starting point, on the far left in the drawing, of the wine industry is the recognition that fermenting grapes produces wine (*unspecified* wine to use Gould's terminology). Then diversity is introduced, there are green and red grapes which may be fermented – with or without skin – and then three varieties of wine appear: red, rosé, and white. Adding a multitude of grape varieties that develop over time – spontaneously and as results of conscious breeding – employed in a huge amount of contexts (microclimates) yield an enormous variety of wines. The grapes grown on one side of a small hill in Piedmont in Italy would have one famous trade name, the same grapes grown on another side of the same hill will be known under a different name.

Attempting to avoid the miserable state of 'perfect competition' – where no money is made – market economies produce great diversity. A standard supermarket in the United States may stock 30.000 different items. While present-day economics pays scarce attention to this phenomenon of diversity, it is extremely important to note that early economists, starting with Botero (1589) and Serra (1613 /2011) saw this increase in diversity as being the key to wealth creation and to bringing about the wealth of the cities (Serra 1613 / 2011).

The argument is picked up almost 200 years later by Adam Smith under the heading of 'division of labour', but one can justifiably ask what role the division of labour plays in today's economics. After all economic activities became alike – reduced to labour hours – the division of labour became irrelevant. When increasing and diminishing returns were eliminated from mainstream economics in the 1930s – in order to make room for equilibrium – Serra's point from 1613 disappeared: that increasing returns under a large division of labour was the key to wealth and that diminishing returns was the key to poverty.

In 1841 German economist Friedrich List described the connection between diversity and political freedom like this:

“This is why the population of an industrialized society is brought together in a few conurbations in which are concentrated a great variety of skills, productive powers, applied science, art and literature. Here are to be found great public and private institutions and associations in which theoretical knowledge is applied to the practical affairs of industry and commerce. Only in such conurbations can a public opinion develop which is strong enough to vanquish the brute force, to maintain freedom for all, and to insist that the public authorities should adopt administrative policies that will promote and safeguard national prosperity. ...”

¹⁰ German economist Karl Bücher (1847-1930) was the foremost representative of a now defunct tradition of economics which united the study of technologies to the study of ever-increasing size of economic units, from tribal economies to the global economy, through various stages. For a discussion, see Reinert 2000.

Standardization – for and against.

Standardization creates technological progress increasing the size of the market. However, traders in Early Europe faced an enormous number not only of tariffs, but also an enormous variety of standard measures varying from city to city. An early 16th century volume (Pasi 1521) is a handbook comprising more than 200 pages attempting to serve as a guide for the bewildered tradesman. For example, the *Brenta* was a volume for liquids in both Switzerland and Italy, but in spite of the name being the same, the size of this varied considerable from town to town. In Renaissance Italy the length measurements were shown by metals attached to the church wall, so both travelling salesmen and resident customers could consult.

In the 20th century mass production standardization was the key to wealth, both Western capitalism and communism were based on this principle of Fordist mass production. In that sense communism and capitalism were isomorphic, they employed the same productive principles under politically very different regimes. It may indeed be argued that a communist planned economy on a large scale was only possible under the Fordist paradigm, when the number of different products the system had to handle was limited. It may be argued that the timing of the collapse of the Soviet system was probably also a result of the transition from the Fordist mass production paradigm – with few final products – to a techno-economic paradigm based on information technology, flexible production, and a plethora of final products.

Carlota Perez describes the challenges from Fordist mass production to the present production paradigm as follows:

‘The very essence of the mass production paradigm was homogenization. The more you could standardize consumption patterns and the greater the mass of people involved, the more you could increase productivity and the higher the standard of living you could hope to attain for the majority. The blue uniform of Mao Tse Tung’s cultural revolution was only an extreme case of Ford’s original dictum "you can have any color, as long as it is black". So egalitarian ideas were strongly backed – probably unconsciously – by the nature of the emerging potential for wealth creation and “felt” more realistic the more this potential came to be understood.

By contrast, the presently diffusing information technology paradigm seems to thrive in diversity and differentiation. Both the adaptable nature of microelectronics technologies and the flexibility of the modern organizations allow astonishingly high levels of productivity while handling diversity. Changes in product mix, in quantity and quality, modifications to models or adaptations to customer requirements can often be made automatically. Differentiation in products and markets is seen as the route to maximum value creation (even if increasing the volume of each segment is also profitable). There are tens of thousands of little "niche" markets that are comfortably accommodated by the distribution channels. The unconscious ideal which guides product and market segmentation is that of a “personalized service”.

All these trends towards variety would suggest that egalitarian ideas have a much weaker footing. But this need not be an obstacle for the construction of an effective solidarity program. Indeed, the present form of differentiation by income levels is not the only one possible. An alternative and socially welcome differentiation can take place “horizontally”, by multiple life-styles, fostering the flourishing of national, occupational or other characteristics and identities; where people are proudly different and socially recognized as of equal value. The most varied ways of living can provide equivalent levels of satisfaction, inside countries and across the planet, while creating favorable conditions for dynamic wealth generation through the flourishing of diversified worldwide production..¹¹

The question here is if Chinese market-leninism might be doing a better job than European capitalism in the transition described above. Both the traditional and the contemporary Chinese governance system tell us that there are often confrontations and tensions in the relationships between the central government and the localities.¹² Although the pre-1978 Chinese economy is generally labelled as one of ‘central-planning’, decentralization in China has some roots dating back to the 1950s, in particular in the latter years of the first Five-Year Plan (1953-1958).¹³ At that time the efficiency of vertical administration was constrained by the variations in China’s geography, transportation conditions and communications capacity.¹⁴ So unlike the former Soviet Union, where the strong vertical administration sidestepped local governments and allocated plans directly to enterprises, ‘the Maoist system decentralized economic and administrative power to the localities’, and most of the reform initiatives were from the ‘bottom up’.¹⁵ As a result, the power of provinces was expanded, and the control of a large number of industrial and commercial enterprises was transferred to the hands of local management.¹⁶ Although decentralization in the 1950s did not change the entire central-planned scheme in the pre-1978 era, this kind of decentralization increased a certain degree of economic power at the local levels that survived into the 1960s and 1970s.

In the process of marketization in the post-1978 era, the authority of the Party-state and the centralized control of Beijing have declined further, and the political and economic powers have been gradually devolved in practice to local governments. While the centre still has political control over the local through the system of party-sanctioned appointments of officials, its fiscal capacity went into decline. Decentralization is also manifested in law-making. As Perry Keller points out, ‘the Chinese legal order therefore effectively remained split between the formal legal powers of the NPC, which symbolized the unitary nature of the state, and the administrative power of the central and ... [provincial] bureaucracies to issue

¹¹ Perez, Carlota, ‘The Social and Political Challenge of the Present Paradigm Shift’, Oslo: Norsk Investorforum, Working Paper No. 5, 1997. Downloadable on <http://carlotaperez.org/papers/1-the-social-and-political.htm#9>

¹² For the central-local relationship and China’s governance system, see Ting Xu, *The Revival of Private Property and Its Limits in Post-Mao China* (London: Wiley, Simmonds and Hill Publishing), 2013, forthcoming).

¹³ See Lardy, *Economic Growth and Distribution in China*, 3-4.

¹⁴ See *ibid*, 20.

¹⁵ See Jean C. Oi, ‘The Role of the Local State in China’s Transitional Economy’, *The China Quarterly*, no. 144 (1995): 1134.

¹⁶ See Lardy, *Economic Growth and Distribution in China*, 33.

and enforce normative documents'.¹⁷ The term 'federalism' has been widely used to characterize the changes that have taken place in the Chinese polity.¹⁸ Scholars have described (albeit in different ways) the nature of the decentralization from the central to local governments in contemporary China as quasi-federal or simply, federal,¹⁹ although the Chinese political and legal systems lack the institutional infrastructure of 'constitutional federalism' and local governments in China do not have 'formal political [and legal] autonomy *vis-à-vis* the centre'.²⁰ Some scholars argue that the de facto federalism that has taken place is market-preserving and underpins economic growth in China.²¹

In the process of decentralizing power from the central government to local governments, the previously assumed 'zero-sum model' of the relationship between the centre and the local is no longer sufficient.²² First, local governments have developed various kinds of strategy to cope with the central government in decentralization. In this sense, rather than preserving and stimulating the market, 'federalism' has also set up barriers to marketization. For example, local protectionism involved 'the illicit and irregular use of administrative controls by local governments to interfere with the flow of commodities between localities'.²³ Huang Yasheng also demonstrates that domestic capital mobilizing across regions in China is very low.²⁴ Secondly, some scholars also remind us of the possible check function of local governments. For example, various kinds of reform have conducted across different regions in China. In the wake of the Tiananmen Square crackdown in 1989, the centre could not bring these local reforms to a halt and restore the central planning completely, due partly to the resistance of local leaders.²⁵ Thirdly, regional inequality and variations should also be taken into account when examining the transformation of the governance system.²⁶ Nevertheless, this kind of 'involuntary' decentralization has promoted a certain degree of diversity in China especially in the area of economic policy. For example, since the 1980s, Special Economic Zones have been set up including Shenzhen, Zhuhai and Shantou in Guangdong Province, Xiamen in Fujian Province and the entire Hainan Province. They enjoy special economic policies and more power in making governmental decisions. The first auction of land use rights was done in Shenzhen on 1 December 1987, although this practice obviously contravened the

¹⁷ Perry Keller, 'Sources of Order in Chinese Law', *American Journal of Comparative Law* 42, no. 4 (1994): 723. See also the Legislation Law of the PRC (2000).

¹⁸ See Goldstein, 'China in Transition': 1127.

¹⁹ See e.g., Cao, Qian and Weingast, 'From Federalism, Chinese Style to Privatization, Chinese Style'; Huang Yasheng, *Inflation and Investment Controls in China: The Political Economy of Central-Local Relations During the Reform Era* (New York: Cambridge University Press, 1996); Tsai, 'Off Balance': 4.

²⁰ See Tsai, 'Off Balance': 4.

²¹ See e.g., Qian Yingyi and Barry R. Weingast, 'China's Transition to Markets: Market-Preserving Federalism, Chinese Style', *Journal of Policy Reform* 1 (1996): 149-185; Qian Yingyi and Barry R. Weingast, 'Federalism as a Commitment to Preserving Market Incentives', *The Journal of Economic Perspectives* 11, no. 4 (1997): 83-92; Barry R. Weingast, 'The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development', *Journal of Law, Economics & Organization* 11, no. 1 (1995): 1-31. There are also critiques on this argument that it is rather 'market-thwarting federalism', see Kellee S. Tsai, 'Off Balance: The Unintended Consequences of Fiscal Federalism in China', *Journal of Chinese Political Science* 9, no. 2 (2004): 1-26.

²² See generally, Linda Chelan Li, *Centre and Provinces—China 1978-1993: Power as Non-Zero-Sum* (New York: Oxford University Press, 1998).

²³ Wedeman, *From Mao to Market*, 17.

²⁴ See Huang, *Selling China*, 66.

²⁵ See Huang, *Inflation and Investment Controls in China*, 1-2.

²⁶ Yang Dali, *Beyond Beijing: Liberalization and the Regions in China* (London: Routledge, 1997), 137-139.

Constitution; four months later, on 12 April 1988 the constitution was amended to allow the transfer of land use rights (Clause 4 of Article 10). The Chinese government has recently announced its decision to open a Free Trade Zone in Shanghai with the aim to attract foreign investment and to boost the economy.²⁷

Yet, the extent of diversity in China should not be exaggerated. China still lacks a 'market' of ideas which, in our view, is the key to the examination of the question whether China is 'forging ahead'. The Chinese government has the ability to mobilize a significant amount of resources and money to invest into high tech. For example, China is now taking the lead by developing renewable energy and building its 'green economy'.²⁸ Human capital is accumulating rapidly – the number of the science and engineering degrees granted by Chinese universities is now comparable to US total. Yet the US (now has superseded Europe as a global superpower) remains the ideal place for the Chinese elites to further their studies and to enhance their academic or professional careers. According to the figure from a survey by the Oak Ridge Institute for Science and Education in Tennessee, ninety-two percent of the Chinese who gained a PhD in science and engineering in 2002 were still in the US in 2007.²⁹ The US continues to retain the best and the brightest Chinese students. Within China, becoming a civil servant, similar to the situation hundreds of years ago, remains the number one career choice for university graduates. Pursuing alternative careers in science and engineering or in private business sector seems less attractive. Chinese universities are still being run as government bureaus. Directors of universities hold governmental ranks. Space for free academic discussion and diverse modes of thought is still limited. Many scholars still function in the 'velvet prison'.³⁰ Similarly, many high-tech and innovation schemes are still directed by the top-down approach. There are also many obstacles to entrepreneurship and innovation. For example, it is still difficult for small-sized private enterprises to access bank loans.³¹

Standardization sometimes presents a dilemma. On the one hand it is clear that standardisation of measures and technological platforms allows for mass production. This is why the lack of standardization in Renaissance Italy – the most progressive country at the time – to some extent comes as a surprise. It is e.g. clear that early bandwidth standardization for cellular telephony achieved by the telephone companies in the Nordic countries was key in giving Nordic producers like Nokia and Ericson a technological advantage to run down the learning curve and capture volume and market share. On the other hand, not adhering to international standards may protect a country. Russia, having a different railway gauge from the rest of Europe, delayed invasion by rail and Switzerland, not adhering to building

²⁷ See http://news.xinhuanet.com/english/china/2013-08/27/c_132667878.htm (accessed 27/08/2013).

²⁸ Mathews, John and Reinert, Erik, 2013, 'Renewable, Manufacturing and Green Growth: An Energy Strategy Based on Capturing Increasing Returns', *Futures* (forthcoming).

²⁹ <http://www.universityworldnews.com/article.php?story=20100305112257670> (accessed 21/05/2012).

³⁰ Miklos Haraszti, *The Velvet Prison: Artists under State Socialism*, trans. Katalin Landesmann and Stephen Landesmann (New York: Basic Books, 1987).

³¹ See Ting Xu review on Martin Jacques. *When China Rules the World: The End of the Western World and the Birth of a New Global Order*, 2nd edition. London: Penguin Books, 2012. *LSE Review of Books*, available at <http://blogs.lse.ac.uk/lsereviewofbooks/2012/06/16/when-china-rules-the-world-martin-jacques/#more-3286>, published on 16 June 2012.

standards (e.g. widths of household equipment), efficiently protected its own producers by erecting high barriers to entry for foreign producers of refrigerators, stoves and washing machines.

Stephen Jay Gould dreads the lack of variety in modern society: “In a society driven, often unconsciously, to impose uniform mediocrity upon a former richness of excellence – where McDonald’s drives out the local diner, and the mega-Stop & Shop³² eliminates the corner Mom and Pop – an understanding of full ranges as natural reality might help to stem the tide and preserve the rich raw material of any involving system: variation itself” (Gould pp. 229-230).

Like so many entities diversity comes with qualitative attributes. We may also have to distinguish between superficial diversity and real diversity. Superficial diversity may refer to having access to 10 pieces of art by the same artist or 20 different breakfast cereals in your local supermarket versus possessing 10 pieces of art from 10 different centuries or 20 different technological solutions for the production of energy. What is required are fundamental differences, fundamentally different approaches like different general purposes, technologies.

Our fear is that the European Union project fails in its balance of diversity, a failure which is a residual of 20th century Fordist thinking. There are arguments for standardizing vegetables – like the curvature of cucumbers – but standardizing fruit and vegetables also tends to deprive them of, yes, diversity. There are arguments that nations converging in a process UNCTAD once called “symmetrical development” could indeed benefit from a single currency. That was the original plan for the Euro – a currency for symmetrically developed core countries – and the key problem of the EU today is that the diversity between the strong core economies – which would have benefitted from a common currency – and the rest was not observed. Peripheral EU countries, like Italy and Greece, were still under inflationary pressures which had a political origin. To stem the pressures of the political extremes, these governments – like traditional democratic governments in Latin America – tended to spend more money than they had. Inflation had been the price to pay in order to achieve political stability, and devaluations represented the safety valve of the system. Joining these peripheral countries in a currency union with the economically strong countries – not observing this crucial difference – lies at the core of EU’s problems today. In other words, not understanding diversity lies at the core of Europe’s problems.

Unifying research projects under huge umbrellas is probably not a good idea for several reasons. Serendipity – discovering what you did not look for but which is more interesting than what you looked for – may be lost. There is also a risk that interesting projects which do not fit under the verbal umbrellas that happen to be in fashion in the research bureaucracy never get funded. Decentralizing research programmes – which will come to follow different paths and grow apart – may prove more successful.

³² Today the example would have been Walmart.

Close observers of the growing eurobureaucracy also comment to the elitist and non-integratory way this bureaucracy is being developed. Being isolated in Bruges, Belgium, the European College is an example of regional policy, but rather than bridging diversity it seems likely that this will develop an isolated and self-contained eurobureaucracy, of the kind the new European parties – The Five Star Movement in Italy, UKIP in England, and Allianz für Deutschland in Germany – are loathing.

Monopolies of Power vs. Diversity and Balance of Countervailing Powers.

The history of Florence reveals an apparently inconsistent political model. Florentine society balanced between oligarchy (the Medici family), corporatism (*la signoria*) and democracy. Perhaps also here the blend – the apparent lack of a coherent model – in fact not only represented a strength but was a key success factor. Maybe – in the name of diversity – all these three models of governance have their advantages.

Before democracy, Europe went through what might have been close to a mandatory passage point of Enlightened Despotism, typified by the 18th century Enlightenment rulers. The problem with this system is of course that despotism rarely remains enlightened for a long time. However, the presence of enlightened philosophers was in itself a sign of prestige for which rulers strived, and their influence on ‘despotism’ was strong.

The corporatist dimension guaranteed a diversity of representation across professions.³³ Being elected through balloting for only two months at the time, the government of Florence – the *signoria* – was protected against the economic interests of a single economic and political group. The nine members of the *signoria* were required to consult with experienced specialized bodies (for instance for trade or war), but the main continuity of the Florentine political system was in the hands of the professional guilds, not – as it would have been under a democracy – by individuals. The fact that the financial sector, banks, was only one of the nine members of the *signoria* would presumably have prevented the financial sector from achieving the power it has now achieved in the West.

As the *signoria*, Enlightened Despotism was also expected continuously to consult with the wisdom of the age. We can use Sweden as an example. During what in Swedish history is dubbed “The Age of Greatness”, the Swedish monarchy imported key European intellectuals. Dutchman Hugo Grotius (1583-1645), generally considered the father of international law, became a Swedish citizen and served as Sweden’s ambassador to Paris from 1635. Philosopher Rene Decartes (1596-1650) went to Sweden on the invitation of Queen Christina in 1649, but died there of pneumonia the next year. German philosopher Samuel Pufendorf (1632-1694), of Natural Law fame, became a professor at the university in Lund and stayed in Sweden from 1668 to 1688. It is important to notice that the import of this illustrious foreigner was part of a nationalistic campaign: the University of Lund had been re-founded in 1666 as part of an attempt to swedify a recently acquired territory. The same cult of foreign knowledge – rather than of foreign capital – in order to increase national strength was at the

³³ Najeemy, John M., *A History of Florence, 1200-1575*, Malden, MA: Blackwell, 2008.

core of Elizabethan England³⁴. Still in the tradition of Giovanni Botero, strengthening the nation meant increasing diversity through the employment of foreigners.

Indeed one of us has argued that one representative starting point for European civilization was the shift from venerating the bodies of religious Saints to venerating the bodies of dead philosophers. This can be exemplified with the brave and violent leader of the Venetian forces against the Turks – Sigismondo Malatesta, *the Mastiff of Rimini* (1417-1468) – who wanted to bring prestige to his native Rimini by bringing home the body of Plethon (Georgius Gemistus) (1389-1464) from the Peloponnese.³⁵

If we are to pinpoint one politically related event which started the Western Renaissance, the best candidate is probably Plethon's lectures in Florence which caught the attention of the ruler – Cosimo de Medici the Elder (1389-1464). Plethon's presence in Florence led to the revival of Greek knowledge in Western Europe. The fact that Plethon himself was an adherent to polytheism – the cultivation of a pantheon of many Gods – also partly explains why the Renaissance did *not* reinforce the role of the Catholic Church, but rather increased diversity by bringing back competition from gods and beliefs of the past.

As the art of the period so wonderfully testifies – e.g. in the paintings of Sandro Boticelli (1445-1510) – the Renaissance brought back the primitive gods and joys of life from the pantheon of Greek gods and their Roman counterparts. From Giovanni Botero's cult of the diversity of nature and culture to Plethon as the philosopher who created the political spark behind the Renaissance, the key aspect – indeed a mandatory ingredient of the European Renaissance – was an increase in diversity.

This stands in sharp contrast to China starting from the Ming period (1368-1644), which was subject to the opposite phenomenon, a decrease in diversity combined with an entrenched orthodoxy, public administration and law and order. China was losing the diversity that existed in the Tang-Song period (618-1279) which has been recognized as the most prosperous period in Chinese history based upon cultural pluralism and the generation and diffusion of useful knowledge (proto science and technology) among cultural, intellectual and business networks. However, this efflorescence in Tang and Song China ended in a state of equilibrium. Cultural pluralism was superseded by unity.³⁶ Although Neo-Confucianism at its early stage engaged in debates with other modes of thought, it matured into state orthodoxy under the Yuan (1271-1368) and Ming (1368-1644) dynasties. Contemporary China now faces the same problem – the lack of cultural pluralism and the equilibrium state in its economic development. Whether there will be a transition from the economic and geopolitical 'great divergence' to the 'convergence' between China and the West and China's eventual

³⁴ Yungblut, Laura Young, *Strangers Settled Here Amongst Us: Policies, Perceptions, and the Presence of Aliens in Elizabethan England*, London: Routledge, 1996.

³⁵ For a brief discussion of Plethon and Malatesta and the role of diversity, see Reinert, Erik S. 'Emulation vs. Comparative Advantage: Competing Principles in the History of Economic Policy'. In Cimoli, Mario, Giovanni Dosi and Joseph Stiglitz (eds), *Industrial Policy and Development; The Political Economy of Capabilities Accumulation*, Oxford University Press, 2009, pp. 79-106.

³⁶ See Ting Xu, 'Efflorescence in Tang-Song China', URKEW Working Paper, available at: <http://www.lse.ac.uk/economicHistory/Research/URKEW/papers/Ting.pdf>,

‘forging ahead’ will largely depend on whether China could continue promoting diversity and break through the equilibrium state.

This is not to say that all Italian city states of the Renaissance were based on the same political model as Florence. Also in Venice the corporatist – profession-based – element of power and rule was important (the Venetian guilds were called *Corporazioni*). The *de juris* ruler of Venice – the Doge – was elected in an extremely intricate process insuring the absence of corruption, verging on paranoia in its absurd complexities, but the power of the Doge was very limited. Not even able to leave Venice without the consent of the Senate, the Doge was normally a professional businessman who virtually had to give up his business when he was elected. Being a Doge was a duty to the Polis, so Venice is probably the political system which has come closest to the old wisdom of giving power only to those who do not want it. In this philosophy wishing power automatically disqualifies one from public office. Limited by the political power of the guilds, the composition of the Venetian senate was sufficiently open to new powerful players to create a *circulation of elites* in Pareto’s and Schumpeter’s sense. Both the Florentine and the Venetian systems were created with built-in checks and balances, to achieve – in John Kenneth Galbraith’s felicitous term – a balance of countervailing powers. In both states a very large number of citizens served in the government bodies for very brief periods. Again, diversity was a key element in governance.

The key element in the growth of European welfare, however, was that literally hundreds of different states – each exhibiting more or less despotic tendencies – were in intense competition in war, in luxuries and in intellectual prowess.

In the United States antitrust laws, starting in the 1890s, and the 1934 Glass Steagall Act are examples of laws consciously acting to maintain the diversity which is the basis of competition and of the reduction of vulnerability. The Glass-Steagall Act decision that no US bank could have offices in more than two federal states is a crystal clear recognition that the diversity of banks – having a large number of banks – is the best insurance policy against financial crises. After the abolition of the Glass-Steagall Act, the crisis that started in 2007 has proved beyond doubt how wise this legislative emphasis of diversity was. It should be noted that the Communications Act of 1934 similarly limited the number of newspapers and radio stations that one company or group of companies could own. This was a parallel decision to maintain diversity, also in this case in order to save democracy.

How Lack of Diversity Stifles Development.

Not only is technological change a very undemocratic process, it is also often not very well understood even by the people who are very close to what is happening. Before the advent of electrical light, people who would have been consulted as to what direction research on lightening should take would probably have suggested inventing a kerosene lamp that produced less black soot. On the other hand, Chinese water clocks are an example of a dead-end technological trajectory, one of the lines that never reached the right hand wall in Figure 1. The alternative to the water clocks, mechanical clocks, were invented in the West.

An important feature in the history of technology is that even the persons near the inventions did not initially see their full potential. The steam engine was initially just seen a pump for drawing water out of mines, and in the early days microprocessors only found use in hearing aids. Werner von Siemens never thought electricity would be used in homes, and in 1943 IBM's chairman Thomas Watson thought there might be a world market for five computers.

So it is important that many more ideas than those which in the end succeed are being promoted. All organisms tend to produce more offspring than can possibly survive, a process which Darwin gave the name 'superfecundity'. These offspring are not all alike. On the average the members of a species that do survive will be more fit to survive the ruling conditions than those who do not survive. Similarly, a human society which produces a superfecundity of ideas and approaches to solving problems – as did Europe during the Renaissance – will by definition also produce many more solutions which will be tried out in government offices and by market actors. A society which is content with things the way they are and only perpetuate the ideas on which present status quo is founded will block the superfecundity that is at the root of the selection mechanisms behind progress. So, almost by definition, the centralization policies of the European Union would tend to limit the superfecundity of ideas.

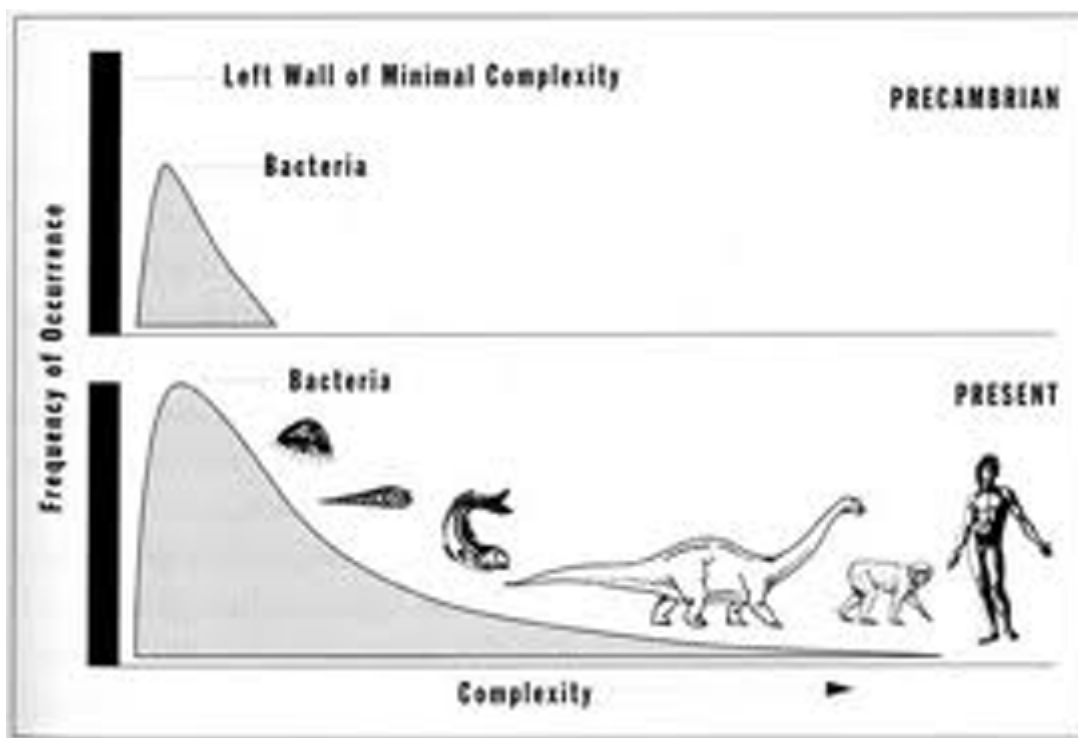


Figure 2. Low Complexity vs. High Complexity Evolutionary systems.

Source: Gould, Stephen Jay, *Full House. The Spread of Excellence from Plato to Darwin*, p. 171.

In figure 2 we again find the left-hand wall where evolution begins. From here the Age of Bacteria evolved into the Age of Invertebrates, followed by the Age of Fishes, Reptiles, Mammals, and finally, The Age of Man. If we draw a parallel to the subsequent periods within the Age of Mankind, of Stone Age, Bronze Age, etc, developing into what Christopher Freeman and Carlota Perez have called techno-economic paradigms.

In spite of so many early technologies actually having been developed in China first – from gunpowder and paper currency to movable type printing³⁷ – it was Europe that led the world into the Industrial Revolution. It is also normally accepted that the science and art of public administration was first perfected in China.³⁸ We argue that a key explanatory variable here was the presence of diversity in Europe and the absence of diversity in China at the time. Because of its lack of diversity, China got stuck in what Gould calls a low-complexity system. The superfecundity that creates the many alternatives from which selection of technological solutions takes place was stopped. The lack of superfecundity, and a parallel diversity of national approaches in which the selection takes place, would tend to keep societies in the simple ‘bacterial’ mode. The rare events – or mutations – which produce the great leaps forward will simply not be present.

The extreme centralization of China severely diminished diversity and caused society’s decay into a low-complexity system. On the other hand, starting in 15th century Italy a ferocious European inter-state competition in war, luxuries and art made the continent into a high complexity system³⁹, into a large scale laboratory where thousands of ideas – for everything from war machines to water wheels – were continuously tested against each other.

One sad conclusion may be that China’s lack of geographical expansionism – its peacefulness – may have contributed to its decay. Two decisions stand out here: 1. The decision to discontinue interoceanic shipping after the disastrous naval expedition against Japan in 1371 and 2) the decision to pay the Mongols not to attack rather than fight back under the Song (960-1279) (the role of the Chinese Wall was to protect from this invasion).

As David Landes wrote once, the two alternative explanations of the supremacy of the West tend to be either that “we (the West) are so good and they so bad; that is we are hardworking, knowledgeable, educated, well-governed, efficacious and productive, and they are the reverse”. The other story is that “we are so bad and they so good: we are greedy, ruthless, exploitative, aggressive, while they are weak, innocent, abused, and vulnerable”. From the perspective of this paper, both explanations have an element of truth in them. At the root of China’s falling behind and the forging ahead of the West lies a key element of diversity, partly attributable to China’s lack of expansion and desire for peace (i.e. paying the Mongols not to attack) and the diversity of the myriad of European nations competing not only in intellectual prestige – e.g. housing competing philosophers – and in luxury, but also competing among themselves in war.

³⁷ See Needham 1956.

³⁸ For a discussion, see Drechsler, Wolfgang, „Three Paradigmes of Governance and Administration: Chinese, Western, and Islamic“, *The Other Canon Foundation and Tallinn University of Technology Working Papers in Technology Governance and Economic Dynamics*, No. 50, 2013.

³⁹ See Sombart 1913a and 1913b for an early statement of this.

As Europe and the West now are becoming the laggards, the military activities of the West are accompanied by falling wages at home, while China seems to be gaining a technological edge in key areas like energy under strong wage growth. That the West fails to understand why Europe and the US got rich – not through free trade but through emulation and national competition in production⁴⁰ – may constitute an important stumbling block for the future, as the West may have to protect its industries in order to protect its living standards. It is also in the interest of China that purchasing power in the US and Europe does not fall.

The Political Implications of the Need for Diversity – or, reinventing the spirit of Giovanni Botero (1544-1617).

The European reaction to the rest of the world as it became known, starting with the Renaissance, was initially the opposite of later eurocentrism. The most famous of the Jesuit fathers who went to China was Matteo Ricci (利瑪竇) (1552-1612), who not only translated the Bible into Chinese, but also the writings of Confucius into Latin. This idea of mutual respect and reciprocity – the latter a term we know from so called ‘primitive’ societies – was an intellectual hallmark of early European contacts with China which continued through most of the European Enlightenment until the decade of the 1770s. This decade saw both the expulsion of the Jesuits from Latin America and from China, where they –as good anthropologists – came to be seen to identify too much with the native population and were in the way of European expansion as it became increasingly imperialistic.

Giovanni Botero, a contemporary of Matteo Ricci and also a Jesuit, became a very early economist and social scientist. The places of his early publications – Würzburg (Germany), Cracow (Poland), and Milan – testify to the pan-European nature both of the church and of academic life at the time. In spite of the laudable programs for student exchange in Europe – like the Erasmus Programme – the percentage of foreign students at European universities were bigger at the time of Ricci and Botero than it is today.

Botero not only was the first scientist to observe the importance of diversity for the creation of wealth (*Sulle Grandezze delle Città*, 1589), he was also the first to produce a general description of the nations of the world (*Relazioni Universali*, 1599). Botero’s description of the different countries and cultures of the world reads like a celebration of Nature’s diversity. The Lapps in Northern Scandinavia are celebrated for their ability as archers, their ability to make boats without nails, and for having the fastest means of transportation in any culture, the reindeer sleigh on snow. How sadly different is the European attitude to their remaining aboriginals today! The key element here is not any loss of a “romantic” view of other cultures, it is the lack of respect for diversity, as if the Fordist cult of standardization had become a permanent feature of Western culture. Individual diversity is tolerated and even encouraged, but in the West a left-over of the 20th century Fordist mind-set is that tolerance is often based on ‘we are all alike’ instead of ‘we are all different’.

⁴⁰ See Reinert, Sophus, *Translating Empire: Emulation and the Origins of Political Economy*, Cambridge, MA: Harvard University Press, 2011

Botero writes on China with the same respect he gives to aboriginal culture like the Lapps, but he marvels at the immense size of the country, its '70 million inhabitants', the land and irrigation, the "marvellous industry", and the fact that nothing gets wasted ("not a palm of land nor a gram of product"). "There is no country (on earth) who studiously better manage their government, and which have better organized the punishments and the bounties" says Botero.⁴¹ The generalized admiration of China which was found in European culture until around the 1770s is not generally known today.⁴² At the time the admiration for China was much more marked in France and Germany than in England.

We now potentially face a situation where the West apparently is falling behind in inventing, just as China was in the 17th century, and the roles will again be reversed. If, at the same time, the West aims at dominating the world created in its own partly anachronistic and Fordist image, this will lead the wrong direction. Western dominance grew in the age of the Havana Charter (late 1940s to late 1970s) when Third World nations were encouraged to industrialize. This would have created a world of symmetrical dependence, and potentially of mutual respect. Presently Western political power is bound to decline if the West insists that the rest of the world shall emulate its political structure without allowing this rest to emulate its economic structure (as was possible during the rule of the Havana Charter). The Havana Charter came to an end when neo-liberal economics gained the upper hand, reintroducing context-free and diversity-free Ricardian economics, and particularly trade theory. Having kept an industrialization strategy in place since the late 1940s, India, China, and other East Asian countries form an exception from the rest of the Third World. Under these diverse circumstances it is high time the West brings back an understanding of diversity – that economic structure will be reflected in political structure – and that the prospects of a Western dominated *Globalistan*⁴³ are far from tempting to many. In this sense understanding and respecting diversity is a precondition peace.

This paper starts with a quote from Stephen Jay Gould's book *Full House*. Towards the end of this volume Gould – perhaps the most celebrated biologist of the last generation – states that his model "does teach us to treasure variety for its own sake"⁴⁴. This should be our goal across a whole range of fields, from political diversity and cooperation between equals, to research and the preservation of biological diversity. Having lost diversity as China once did, we fear that the West will be losing out to China in a similar way that China lost out to Europe 400 years ago.

If a goal is both to eradicate world poverty and to prevent the West from gradually declining into a society with an economic structure that once characterised feudalism – huge differences between a wealthy few and the poor masses – we must rediscover how the West once managed to develop in symmetrical diversity, while at the same time China declined. Understanding this it will also be understood that it is not in the interest of any of the parties that the West be deindustrialized.

⁴¹ *Relazioni*, 1622 edition, pp. 106-107.

⁴² For an overview, see Maverick, Lewes A. *China as a Model for Europe*, San Antonio: Anderson, 1946.

⁴³ Escobar, Pepe, *Obama does Globalistan*,

⁴⁴ Gould, *op. cit.*, p. 229.

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